## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Linda Morales et al.

Art Unit:

2616

Serial No.:

09/960,008

§ Examiner:

Warner Wong

Filed:

September 21, 2001

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For:

Method and Apparatus to

Control Handoff Between
Different Wireless Systems

Atty. Dkt. No.:

NRT.0103US

(13837RRUS02U)

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Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The Examiner has committed clear legal and factual errors in rejecting claim 1 as being anticipated by Gilhousen et al.

Claim 1 recites that in response to determining that handoff is required from a first base station (associated with a first type of wireless system) to a second base station (associated with a second, different type of wireless system), a message is sent from the first base station to the second base station over an interface between the first base station and second base station, where the message indicates to the second base station that handoff is required.

The error underlying the Examiner's rejection of claim 1 is the assertion by the Examiner that the "appended claim limitations merely require an interface between the first and second base stations, which can be <u>broadly</u> met by the link/interface between MSC-I and MSC-II connecting a base station of MSC-I to a base station MSC-II." 4/15/2008 Office Action at 7. This characterization of the claim language is not accurate. Claim 1 specifically recites that a

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message is sent from the first base station to the second base station over an interface between the first base station and second base station, where the message indicates to the second base station that handoff is required. Thus, claim 1 does not just merely recite an interface between first and second base stations – claim 1 specifically recites that a message indicating that handoff is required is sent from the first base station to the second base station over such interface. Since the Examiner's rejection did not properly take into account all express language of claim 1, the rejection of claim 1 is clearly erroneous.

With respect to the "sending a message" clause of claim 1, the Examiner cited column 7, lines 15-28, and column 8, lines 31-34, of Gilhousen. The column 7 passage describes the system depicted in Fig. 1 of Gilhousen, which depicts just a single type of wireless system. Although the column 8 passage of Gilhousen does note that its purported invention "could be used to handoff mobile stations between two systems employing different air interfaces" (Gilhousen, 8:32-33), it is noted that such an arrangement with multiple systems is depicted in Fig. 2, 3 or 4, not in Fig. 1, of Gilhousen. In fact, Gilhousen in columns 8, 9, 10, and 11 describes the handoff procedures that could be performed in the multi-system arrangement that includes two systems employing different air interfaces. In each of these procedures, control messages are exchanged between MSCI (a first mobile switching center) and MSCII (a second mobile switching center) for the two respective systems. A basic procedure is identified in column 9, at lines 19-38, of Gilhousen. Variations of this basic procedure are identified as methods 1-5 in columns 9-12 of Gilhousen. In each of the Gilhousen methods 1-5, to perform a handoff, the MSCI and the MSCII must exchange messaging to perform allocation of channel resources and to perform other setup tasks. In none of these Gilhousen methods that involve multiple systems with associated MSCs (MSCI and MSCII) is there any communication of a message from one base station (associated with a first type of wireless system) to a second base station (associated with a second, different type of wireless system), over an interface between the first and second base stations where the message indicates to the second base station that handoff is required.

In view of the foregoing, it is clear that claim 1 is not anticipated by Gilhousen.

Independent claim 16 was rejected "using the same rationale" as claim 1. Claim 16 recites a first base station system that has a controller to exchange messaging with a second base station system through an interface to perform a handoff of the packet-switched communication

session from the first base station system to the second base station system (where the first and second base station systems perform wireless communications according to different protocols).

As discussed above, handoffs in Gilhousen involve MSCI and MSCII exchanging messaging with each other – therefore, there is absolutely no teaching in Gilhousen of a first base station system exchanging messaging with a second base station system through the interface between the first and second base station systems to perform a handoff of the packet-switched communication session. Therefore, claim 16 is not anticipated by Gilhousen.

Independent claim 24 was also rejected "using the same rationale" as claim 1. Claim 24 recites a first base station system exchanging messaging with the second base station system through a link between the first and second base station systems to perform the handoff (where the first and second base station systems perform wireless communications with a mobile station according to different protocols). Therefore, claim 24 is also not anticipated by Gilhousen.

Dependent claims are allowable for at least the same reasons as corresponding independent claims. In view of the allowability of the independent claims over Gilhousen, it is respectfully submitted that the obviousness rejections of dependent claims over Gilhousen and other references have also been overcome.

Dependent claim 30, which depends from claim 1, further recites that sending the message comprises sending the message over a link that directly connects the first base station and second base station. As conceded by the Examiner, neither Gilhousen nor Bender discloses such a link between the first and second base stations. 4/15/2008 Office Action at 6. However, the Examiner cited Dolan as disclosing a link between first and second base stations.

Applicant respectfully disagrees with this assertion. Specifically, Dolan fails to disclose a direct link between two base stations associated with different types of wireless systems.

Although Dolan refers to two protocols in ¶ [0010], these two protocols refer to a first protocol to communicate between an SDU and an interconnection processor of a base station, and a second protocol to communicate between the SDU and a call controller of a base station. These two protocols have nothing to do with base stations associated with different types of wireless systems that are able to communicate with a mobile station. Dolan proposes the use of first and second packet interconnection protocols, where a first packet interconnection protocol "establishes an interface between a selection distribution unit (SDU) for performing frame selection and voice transcoding, and a base station interconnection processor for transmitting

control information, signaling and user traffic to mobile stations." Dolan, ¶ [0010]. This is illustrated in Fig. 2 of Dolan, where a link 231 between the SDU 224 in the source base station 220 and the call controller 242 in the target base station 240 uses the second protocol, while the link 233 between the SDU 224 in the source base station and the interconnection processor 244 in the target base station uses the first protocol. *Id.*, ¶¶ [0022], [0025]. As noted by Dolan, the use of an SDU and the first and second packet interconnection protocols enhances flexibility. *Id.*, ¶ [0034]. Thus, the two protocols referred to in Dolan refers to protocols to communicate between an SDU and an interconnection processor of a base station, and a second protocol to communicate between the SDU and a call controller of a base station.

Not only does Dolan teach subject matter that is unrelated to the claimed subject matter, it is noted that the teachings of Dolan are inconsistent with the teachings of Gilhousen. In Gilhousen, note that handoffs in a multi-system environment require two MSCs to be involved, where MSCI and MSCII must exchange messages with each other to allow the handoff to occur. Such teachings of Gilhousen would lead a person of ordinary skill in the art away from use of a direct link. Therefore, it is respectfully submitted that a person of ordinary skill in the art would not have been prompted to combine the teachings of Gilhousen and Dolan, since Gilhousen would have led this person of ordinary skill in the art away from such combination.

In view of the foregoing, it is respectfully submitted that there existed no reason that would have prompted a person of ordinary skill in the art to combine the teachings of Gilhousen, Bender, and Dolan. Therefore, the obviousness rejection of claim 30 is defective. *See KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741, 82 U.S.P.Q.2d 1385 (2007).

Claims 31 and 32 are allowable over Gilhousen, Bender, and Dolan for similar reasons as claim 30.

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In view of the foregoing, allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0103US).

Respectfully submitted,

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